Air Waves

A bulletin produced by Nebraska Department of Environmental Quality's Air Quality Division

August 2006

Welcome to the *AirWaves* Bulletin! *AirWaves* will be produced and distributed semiannually by the Nebraska Department of Environmental Quality's (NDEQ) Air Quality Division. *Airwaves* are intended to help keep you up-to-date on current trends and issues regarding air quality in Nebraska.

In *AirWaves* we will cover a variety of issues including proposed regulations on the state or national level, recently enacted regulations, local air quality issues, new software, books, websites, upcoming courses and meetings, as well as other items of interest.

In This Edition

Feds Regulate "Other Solid Waste Incinerators"

The Environmental Protection Agency (EPA) has issued new source performance standards and emission guidelines (effective June 16, 2006) for new and existing "other" solid waste incineration units (OSWI). The federal rules are entitled "Subpart EEEE-Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006", and "Subpart FFFF-Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004".

What is an "Other Solid Waste Incineration Unit?"

OSWI systems are defined in the final rule as an incineration unit with a capacity less than 35 tons per day (tpd) burning municipal solid waste or an incineration unit located at an institutional facility burning institutional waste generated at that facility.

- Waste incineration units include field-erected, modular, and custom built units operating with starved or excess air, boilers, furnaces, pyrolysis/combustion units and air curtain incinerators (except those exempt).
- Municipal solid waste (MSW) means refuse (and refuse derived fuel collected from the general public and from residential commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, plastics, leather, and non-combustible materials such as metal, glass and rocks.
    - The term MSW does not include industrial processes wastes or medical wastes that are segregated from such other wastes. An incineration unit shall not be considered to be combusting MSW for purposes of this subpart if it combusts a fuel feed stream that is 30 percent or less by weight MSW.

- Institutional waste incinerators are located at institutions (e.g., public or private school; college or university; church or civic organization; fire or police department; town, city, county, State or Federal government; etc.) that burn waste generated at that institution.

What emissions are regulated from an OSWI?

The EPA estimates this rule will decrease the total pollutant emissions from OSWI units by 2,200 tons per year through the establishment of emission limits for these nine air pollutants: cadmium, mercury, lead, hydrogen chloride, dioxins/furans, carbon monoxide, nitrogen oxides, particulate matter, and sulfur dioxide. The final rule also establishes opacity limits for OSWI units. The emission limits in the rules are based on levels that can be achieved by installing wet scrubbers. Other emission control technologies could also be used, as long as they meet the required emission limits.

How do I know if I am subject to the OSWI rule?

If you own or operate an incinerator, you may be subject to the federal standards if the incinerator meets the following criteria:

- Incineration units with a capacity less than 35 tons per day burning MSW (very small municipal waste combustors) or an incineration unit located at an institutional facility burning institutional waste generated at that facility.
- Air curtain incinerators that burn less than 35 tons per day of MSW or air curtain incinerators located at institutional facilities burning any amount of institutional waste. Air curtain incinerator means an incineration unit operating by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs.

Are there exemptions to the rule?

You may not be subject to the federal standards if your incinerator meets the following criteria:

- ✓ Cement kilns
- ✓ Co-fired combustors
- ✓ Cogeneration facilities
- ✓ Commercial and industrial solid waste incineration units
  - Includes distinct operating units located at a commercial or industrial facility burning waste generated on-site
- ✓ Hazardous waste combustion units
  - Includes hazardous waste incinerators and combustors, hazardous waste cement kilns, hazardous waste lightweight aggregate kilns, hazardous waste solid fuel boilers, hazardous waste liquid fuel boilers, and hazardous waste hydrochloric acid production furnaces.
- ✓ Hospital/medical/infectious waste incinerators
  - Includes units that combust wastes including but not limited to the following: waste generated in the diagnosis, treatment, or immunization of human beings or animals.
  - Does not include units that combust human corpses, remains, and anatomical parts that are intended for interment or cremation (Please see pathological waste incineration units).
- ✓ Incinerators and air curtain incinerators in isolated areas of Alaska
- ✓ Rural institutional waste incinerators
  - Includes units that are located more than 50 miles from the boundary of the nearest Metropolitan Statistical Area defined as a urbanized area of at least 50,000 inhabitants with a total metropolitan population of at least 100,000
- ✓ Institutional boilers and process heaters
- ✓ Laboratory analysis units
- ✓ Materials recovery units
  - Includes units that combust waste for the primary purpose of recovering metals (e.g. primary and secondary smelters).
- ✓ Pathological waste incineration units
  - Includes units that combust 90 percent or more by weight of:
  - Pathological waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to transport the waste material, and animal bedding.
  - Low-level radioactive waste consisting of waste material that contains radioactive nuclides emitting primarily beta or gamma radiation, or both.
  - Chemotherapeutic waste consisting of waste material resulting from the production or use of anit-neoplastic agents used for the purpose of stopping or reversing the growth of malignant cells
- ✓ Small or large municipal waste combustion units
  - Small municipal waste combustion units burn between 35 and 250 tons per day MSW
  - Large municipal waste combustion units burn more than 250 tons per day MSW
- ✓ Small power production facilities
- ✓ Temporary-use incinerators and air curtain incinerators used in disaster recovery

- ✓ Units that combust contraband or prohibited goods
  - Include units owned or operated by a government agency such as police, customs, agricultural inspection, or a similar agency to destroy only illegal or prohibited goods such as illegal drugs, or agricultural food products that cannot be transported into the country or across state lines to prevent biocontamination.
- ✓ Incinerators used for national security
  - Includes incineration units used solely during military training field exercises to destroy national security materials integral to the field exercises or units used to incinerate materials as necessary to safeguard national security.

Will I need an air quality permit to operate an OSWI unit?

- All sources subject to this rule must obtain a Title V operating permit from your state or local permitting authority.
- For new units that commence operation after December 16, 2005, a complete Title V permit application must be submitted not later than 12 months after the date the unit commences operation. For more information related to the operating permit program, view the "Operating Permits" fact sheet on the NDEQ website under Air Quality Publications.
- All incinerators constructed in Nebraska will need to apply for a state construction permit. The permit must be obtained prior to construction. For more information related to the construction permit program, view the "Construction Permits" fact sheet on the NDEQ website under Air Quality Publications.

How do I comply with the OSWI rule?

In addition to meeting the emission limits, monitoring, recordkeeping, and reporting requirements required by the rule, the following major deadlines must be met:

Event	Deadline
Effective Date	New sources* - 6/16/06 Existing sources – 2/14/06
Compliance Date	New sources - Upon startup or 6/16/06, whichever is later Existing sources – 12/16/10
Compliance Report	Existing sources – 10 days after compliance date
Pre-construction report	New sources only - Prior to construction, reconstruction, or modification or June 16, 2006, whichever is later
Startup notification	Prior to initial startup
Waste management plan	New sources - Prior to construction, reconstruction, or modification or June 16, 2006, whichever is later Existing sources – 60 days after the initial performance test
Operator training course	New sources - Six months after unit startup or December 18, 2006 or the date before an employee assumes responsibility for operating the OSWI unit Existing sources – Compliance date or six months after unit startup or six months after an employee assumes responsibility for operating the unit
Installation of continuous emission monitoring (CEM) system	Prior to initial performance test
Initial Performance Testing and Emission limitations listed in Table 1 of the NSPS	60 days after your OSWI unit reaches the charge rate at which it will operate, but no later than 180 days after initial startup
Initial Performance Test Report	60 days after the performance test
Annual Performance Testing	Within 12 months following the initial performance test and within 12 months of subsequent annual performance tests
Annual Report	12 months after the performance test report and every 12 months after
Semi-annual Deviation Report	Every 6 months – 8/1 and 2/1 each year, or as required by the permitting authority

*New sources commenced construction after 12/9/04 or commenced reconstruction or modification after 6/16/06.

Note: This is not a complete list of all the NSPS requirements. Please see the federal rule for all of the applicable deadlines.

Notifications must be submitted to the Nebraska Department of Environmental Quality, Air Quality Division, P.O. Box 98922, Lincoln, NE 68509-8922 and

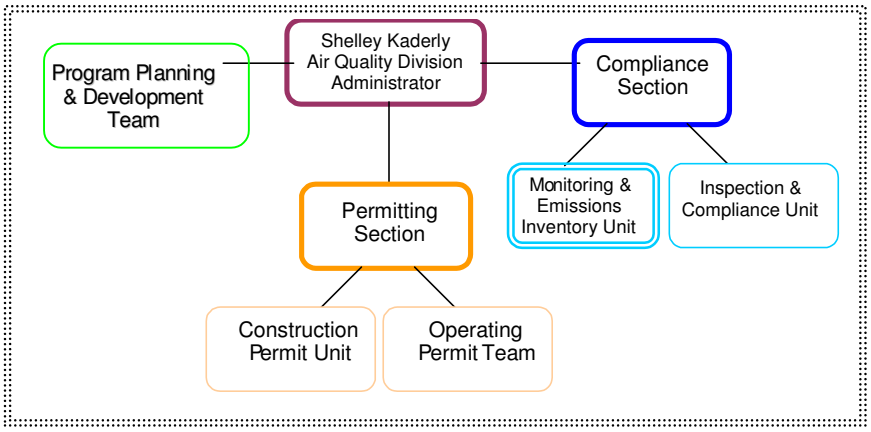
EPA Region VII, 901 5th St., Kansas City, KS 66101-2907. If you facility is located in Omaha or Lancaster County, a notification should be sent to the appropriate air pollution control agency in that area and EPA Region VII. Omaha Air Quality Control notifications should be sent to 5600 South 10th St., Omaha, NE 68107. Lincoln-Lancaster County Health Department notifications should be sent to 3140 N Street, Lincoln, NE 68501.

Subject sources must also comply with the air emission standards, operating practices, reporting, and recordkeeping requirements contained in this rule. You can meet the new emission standards through emission-controlling equipment or through changes in work practices. For more information or for a copy of this rule, contact the NDEQ Air Quality Division at (402) 471-2189 or download the rule from the EPA website at http://www.epa.gov/ttn/atw/129/oswi/fr16de05.pdf.

Spotlight on the Air Quality Division

We will spotlight a segment of the Air Quality Division in each edition of *AirWaves*. In this edition, we highlight the staff responsible for maintaining Nebraska's ambient air monitoring network.

Nebraska is required to conduct ambient air monitoring by the U. S. Environmental Protection Agency (EPA). Ambient air is defined as that portion of the atmosphere, external to buildings, to which the general public has access. The purpose of ambient air monitoring is to collect and evaluate data to determine the overall risks associated with inhaling the ambient air in Nebraska.



Local air quality affects how we live and breathe. Like the weather, it can change from day to day or even hour to hour. To learn more about the ambient air monitoring network, view the latest "Nebraska Air Quality Report" located on our web page under Air Quality Publications at www.deq.state.ne.us.

The Ambient Air Monitoring Staff are in the Monitoring and Emissions Inventory Unit within the Compliance Section and report to Todd Ellis, Compliance Section Supervisor. The staff responsible for the maintaining the monitoring network includes:

- ***Jim Yeggy:*** Jim brings to the NDEQ a wealth of experience in the environmental field. He has experience in both the Air Division and the Water Division and has served in various capacities. His current responsibilities include operating and maintaining the Total Reduced Sulfur (TRS) monitoring network and preparation of quarterly monitoring reports, quality assurance plans, and standard operating procedures.
- ***Chris Hetzler:*** Chris began working for DEQ as a temporary employee in July of 2001. While a temporary employee, Chris assisted the monitoring team with data submission and quality assurance and greatly improved the department's methods of data collection and submission. Chris was hired full time in November 2002 as a program specialist. His current responsibilities include maintaining the particulate monitoring network, data submission, and assisting local agencies with their monitoring programs. He also prepares the annual air quality report.
- ***Brad Pracheil:*** Brad began working for DEQ as a temporary employee in November 2000 to assist in maintaining and operating the monitoring network. Brad's degree in electronics and his experience has been invaluable to the program. Brad was hired on to join the Compliance Section full-time in December 2001. His primary duties are to observe stack tests and determine compliance with the stack testing methods. Although his position is located in the Inspection and Compliance unit, he contributes a portion of his time to help maintain the ambient air network by assisting with quarterly audits, providing backup help as needed, and providing additional experience.

Field Offices

In a state like Nebraska where there is a lot of ground to cover and few people to cover it, field offices are essential to maintaining a widely scattered monitoring network. The assistance of field office personnel greatly reduces driving time to and from monitors and consequently helps keep costs down.

- ***Jim Sexson*:** Jim has worked for the Department since 1994. He is essentially our eyes and ears in the field for most of western Nebraska. Jim provides valuable assistance in maintaining and operating $PM_{2.5}$, PM_{10} and TRS monitors. In addition to all of this he still performs inspections and investigates complaints for the air and surface water divisions.
- ***Shanelle Grudzinski***: Shanelle was hired in the Northeast Field Office in October of 2003. Her primary responsibilities include inspections and complaints investigations for air, solid waste, petroleum remediation, and grants. Her previous experience with analytical instruments has provided helpful expertise when assisting with the TRS monitoring program in South Sioux City.
- ***John Flint:*** John has worked for DEQ since 1996. As John is the sole staffer in the Scottsbluff field office his duties are the most diversified. Most of his time is spent assisting the National Pollutant Discharge Elimination System and Waste Management/Remediation programs, but he also helps with water quality assessment and, most important to the air program, he maintains the PM2.5 monitor in Scottsbluff.

Small Business Environmental Assistance

Hugh Stirts, NDEQ Small Business and Public Assistance Coordinator

It's quite likely that many, if not most, of Nebraska's small businesses don't realize that there are several state organizations devoted to helping, and not regulating, small businesses efforts towards complying with environmental regulations. Nebraska's Small Business Environmental Advisory Panel is one such organization. This panel is comprised of six small business owners and representatives throughout the state, appointed by the Governor and Legislature. Our goals are to both assist small businesses in environmental compliance, and advise the Department of Environmental Quality on the impact of regulations on small businesses. Also, because the members are selected throughout the state, we are familiar with the regional issues and interests.

Our panel members are roughly divided along the following state areas, but anyone can call any member of the panel. Please refer to the location of DEQ's field office areas on NDEQ's web page (www.deq.state.ne.us): Roy has the panhandle area, Jim the west central area, Ron and Joe the northeast area, and Hugh the eastern area. There is now one opening on this panel and the Lincoln area is still to be determined. All panel members have a 'direct line' into the Department of Environmental Quality, and each represents the small business environmental concerns in his or her regions.

The current members are:

- Jim Hellbush, Duo Lift Mfg Co., Columbus NE, 402-564-8023
- Ron Rowse, Rowse Rakes, Burwell NE, 308-348-2276
- Jim Gohl, Gohl Ranch, Culbertson NE, 308-278-2769
- Roy Hahn, Hahn Law Office, Scottsbluff NE, 308-632-2991
- Joe Ferguson, Northeast Community College, Norfolk NE, 402-844-7236
- Hugh Stirts, NDEQ, Lincoln NE, 402-471-8697

Another organization established to help both small and large businesses achieve and maintain compliance with the seemingly myriad of environmental regulations is the Compliance Assistance Team. This team is a part of Nebraska's Department of Environmental Quality (DEQ) and was established to help businesses and the public concerning environmental issues in the state.

One of the primary means by which this team helps businesses and facilities in the environmental arena is through a Compliance Assistance Visit. This involves a visit to the site by trained environmental professionals from the Department, an evaluation of the business's environmental status, suggestions for improvement, and a written report back to the business. This is a free service provided by the state, and can be easily arranged by calling any member of the Small Business Environmental Assistance Panel, or calling Hugh Stirts at 402-471-8697.

Call for a free assistance visit today!

Mark Your Calendars!

AUGUST 2006

15th	Air Update Workshop	9:30 am – 3:00 pm	Life Long Learning Center Norfolk, NE
17th	Air Update Workshop	9:30 am – 3:00 pm	Lancaster County Extension Lincoln, NE
22nd	Air Update Workshop	9:30 am – 3:00 pm	Holiday Inn Kearney, NE
23rd	Air Update Workshop	8:30 am – 2:00 pm	Hampton Inn Scottsbluff, NE

SEPTEMBER 2006

4th	NDEQ office closed	
8th	Environmental Quality Council Meeting	Lincoln, NE
30th	Class I Semi-Annual Deviation Reports due	

OCTOBER 2006

9th	NDEQ office closed	
31st	Method 9 Opacity Certification Training (Smoke School). For registration information, go to www.eta-is-opacity.com/schedule.htm.	Lincoln, NE

NOVEMBER 2006

1st-2nd	Method 9 Opacity Certification Training (Smoke School). For registration information, go to www.eta-is-opacity.com/schedule.htm	Lincoln, NE
10th	NDEQ office closed	
24th-25th	NDEQ office closed	

DECEMBER 2006

1st	Environmental Quality Council Meeting (tentative)	Lincoln, NE
25th	NDEQ office closed	

JANUARY 2007

1st	NDEQ office closed
15th	NDEQ office closed

FEBRUARY 2007

19th	NDEQ office closed

Air Quality Division To Host Annual Workshops

The NDEQ Air Quality Division is hosting four workshops throughout the state to provide industry and consultants information about Nebraska's air quality regulations. The workshops will offer an update of state and federal air quality regulations and air permitting and compliance issues will be discussed.

Following is the Workshop agenda and locations. Please contact Melissa Woolf at (402) 471-6624 or email Melissa.woolf@ndeq.state.ne.us to register for the workshop location you wish to attend.

The workshops in Norfolk, Lincoln, and Kearney will be held from 9:30 am until 3:00 pm with a one hour break for lunch. The Scottsbluff workshop will begin at 8:30 am and last until 2:00 pm with a one hour break for lunch.

Dates & Locations

- August 15th - Life Long Learning Center, Northeast Community College, Norfolk, NE
- August 17th - Lancaster County Extension Office, Lincoln, NE
- August 22nd - Holiday Inn I-80 Exit, Kearney, NE
- August 23rd - Hampton Inn, W. Highway 26, Scottsbluff, NE

Agenda

- ✓ Introductions
- ✓ Air Regulations Update - Title 129 & Federal Regulations
- ✓ Requesting Permit Revisions & Practical Group Exercises
- ✓ Overview of New Air Quality Construction Permit Applications & Permit Templates
- ✓ Air Quality Enforcement Process
- ✓ Compliance & Inspection Practical Group Exercises
- ✓ Stump the Regulators – Bring us your toughest air quality questions & see if we can answer them!
- ✓ Air Quality Jeopardy (Back by popular demand!)

You won't want to miss the 2006 Air Update Workshops! Register today!

Air Quality Division Initiates Mercury Rule Making

The NDEQ Air Quality Division has initiated a rulemaking process to respond to the U.S. Environmental Protection Agency's (EPA) Clean Air Mercury Rule. NDEQ is interested in receiving stakeholder input into the development of the state regulations that are necessary to respond to the Clean Air Mercury Rule.

NDEQ hosted a series of stakeholder meetings in June and July 2006 to discuss rule development options, rule implementation, and solicit stakeholder input. Three meetings were held in Lincoln and were well attended by electric utility representatives, interested citizens, Sierra Club members, pollution prevention coordinators, and regulatory personnel. Information related to the meetings and other relevant information has been posted on NDEQ's website at http://www.deq.state.ne.us/AirDivis.nsf/Pages/Mercury.

The Air Quality Division will utilize the information gathered from the meetings and comment letters received from interested parties to develop a mercury regulation for Nebraska. The Division expects to propose regulations to the Environmental Quality Council at the hearing December 1, 2006. For more information related to the mercury rule making effort, contact Melissa Woolf at (402) 471-6624 or melissa.woolf@ndeq.state.ne.us.

Pollution Prevention Corner

LaserPaint™ Targets Precision Painting in Industry, Auto and Body Shop

Phillip Rooney, Environmental Health Educator, Lincoln Lancaster County Health Department
Joe Bolick, Waste Reduction Specialist, Iowa Waste Reduction Center

Spray painting is not only time consuming but also involves excessive amounts of materials, costs, and wastes. The Iowa Waste Reduction Center developed a tool called the LaserPaint™ to make spray painting easier and more efficient.

The LaserPaint™ is an easy to use laser guide that readily attaches to any spray gun. The LaserPaint™ enhances spray technique while decreasing costs, materials, waste, and time. The LaserPaint™ can improve the overall process and production of spray paint application by helping new spray technicians learn the proper techniques and helping experienced technicians sharpen their skills.

When the gun is held at the optimal gun-to-part distance, two laser beams converge to form a single dot projected onto the part being painted.

This optimal distance can be adjusted to best suit any project at hand. The single dot provides spray technicians with visual feedback assuring them that they are holding the spray gun at the proper angle and distance and, therefore, performing at maximum efficiency.

When the two beams separate, spray technicians can make the changes necessary (hold the gun closer to the part or farther from it or adjust the angle) to maintain the single dot (optimal distance) and improve overall performance.

Another visual feedback cue is to use the single dot to help produce the proper amount of overlap. Being able to follow the dot visually with each pass over the part helps technicians produce a consistent spray pattern and an even overlap, resulting in a uniform finish while reducing the amount of paint used.

Proper use of this laser technology results in a reduction of paint used, waste, reruns, and costs. The LaserPaint™ is also successful in reducing volatile organic compound (VOC) emissions, hazardous wastes, and ozone-causing air pollution. Tests revealed that transfer efficiencies could be increased by 11 to 24% using the LaserPaint™. By using all the features that the LaserPaint™ has to offer, spray technicians can repeatedly provide a high quality finish with enhanced environmental benefits.

The LaserPaint™ is available for all automotive, military, and industrial customers. For more product and ordering information, contact the Iowa Waste Reduction Center at (319)273-8905 or visit the web at www.laserpaint.us. The Iowa Waste Reduction Center is a service of the University of Northern Iowa.

Maintain Quality Environment and Air in the Home

Shirley Niemeyer, Ph.D., Extension Specialist, Housing & Environment, UNL Extension

Although the Nebraska Department of Environmental Quality's Air Division is not responsible for regulating indoor air quality, we will periodically include indoor air quality materials in the AirWaves Bulletin. Maintaining indoor air quality is essential to a healthy environment.

Asthma is a serious lung disease that is a leading cause of long-term illness in children. Nebraska ranks about seventh highest in asthma death rate per number of people in the U.S. Asthma is a leading reason for school absenteeism. Asthma triggers can be found in the home. By managing their environment, people may be able to reduce the risk of an asthma attack, and prevent asthma from getting worse. Mitigation generally involves two components: reducing the existing levels of exposure and preventing any increases in the suspected agent in the indoor environment. However, it is not known what degree of environmental mitigation is needed to reduce the risk of attacks in known asthmatic individuals.

Second-hand smoke in the home is a major player in asthma. The National Academy of Sciences reported in *Clearing the Air*, that a link exists between asthma in pre-school children and indoor exposure to tobacco smoke, and between asthma and dust mites. The studies also indicated a causal relationship between making asthma worse in sensitive persons and exposure to tobacco smoke (for pre-school children) and to cats, cockroaches, and house dust mites. In addition, dogs, mold or other agents in damp indoor spaces, nitrogen dioxide and nitrogen oxides had sufficient evidence of an association in sensitized person. Other allergens and irritants in the home also may trigger asthma attacks or make them worse in sensitized persons. However, more research is needed to better understand the association between the allergens and asthma.

- To address indoor asthma triggers, after getting medical recommendations, first identify and reduce the pollutant at the source, and ventilate well to dilute the pollutant. Reduce moisture levels and any standing water.

- Do not allow smoking in the house or car. Smoke particles linger on walls and other surfaces, emitting particles and gases even after smoking has stopped.

- Dust contains more than 5,000 ingredients, including fibers, dander, soil, bacteria, molds, smoke residues, pesticides, dust mite allergens, skin flakes and insect parts. To reduce the presence of dust in the home, choose surfaces and other household items that have smooth, easy-to-clean surfaces or are washable. Clean with damp cloths or mops so dust doesn't become airborne. Use quality vacuums with HEPA filters to help catch and retain dust, and change bags or filter systems when full. Change or clean heating and cooling system filters and vents as directed by the manufacturer. Leave shoes at the door and use high quality mats (about six walking steps) inside and outside of entrance doors. Wash rugs weekly.

- Damp indoor spaces tend to support house dust mites, cockroaches, mold, and rodents, and may speed up out-gassing from materials and furnishings.

- To control dust mites, begin by reducing humidity to about 30 or 45 percent and use good cleaning strategies. Dust mites live in warm, humid places and in soft furnishings, and feed on human skin flakes. Remove clutter and stuffed toys, selecting toys that can be washed or have hard surfaces. Cover mattresses, box springs and pillows with covers labeled for dust mite control; wash all bedding in hot water weekly; avoid furnishings that are difficult to clean; and use easy-to-clean hard surfaces for bedroom furnishings, floors and window treatments. For particularly sensitive people, replace pillows and quilts every year or two.

- Combustion products including soot, smoke and gases such as nitrogen dioxide can cause breathing problems for children with asthma. Decrease this problem by having heating and cooking equipment serviced yearly, providing adequate exhaust and intake ventilation, and limiting or avoiding the use of wood-burning stoves, kerosene heaters, candles and fireplaces.

- Animal skin flakes, urine and saliva can be asthma triggers. Choose pets that aren't asthma triggers for someone in the household. If a pet is a trigger, try keeping it out of the bedroom or outside the home. To prevent rodent and insect problems, keep food and garbage in sealed containers, reduce clutter, control water leaks and standing water, seal

openings where pests may enter and consider using pest control products.

- Keeping humidity below 45 or 50 percent and controlling standing water and potential moisture can control mold. Maintaining and using proper venting and keeping window screens in good repair and doors and other openings closed can control pollen. Weatherstrip and caulk cracks and unwanted openings and fix broken windows. Pollen can be controlled in much the same way as dust.

- Volatile organic compounds are gas pollutants and chemicals that can evaporate and become asthma triggers. Avoid storing solvents, buying only what will be used immediately. Keep container lids tight and choose water-based, unscented and non-aerosol products when available. Consider keeping these compounds in detached storage units if possible.

- Be aware of other potential asthma triggers, which may include personal care products and perfumes.

When items are recognized as asthma triggers, take steps to reduce or eliminate their presence in the home. It is important to follow your medical professional's guidelines. For some of these factors discussed, it may be possible to use mitigation with a reasonable hope of reducing the rate of asthmatic attacks. For questions related to indoor air quality, contact Shirley Niemeyer at (402) 472-6319.

References: Damp Indoor Spaces and Health and Healthy Indoor Air for America's Homes

Regulatory Roundup

At its June 2006 meeting the Environmental Quality Council (EQC) adopted changes to Title 129 – Nebraska's Air Quality Regulations - that removed methyl ethyl ketone (MEK) from it lists of regulated hazardous air pollutants in Appendix II and Appendix III, and also revised and reformatted the appendices for accuracy and user convenience. The de-listing of MEK makes Nebraska's listing of regulated hazardous air pollutants consistent with the Environmental Protection Agency's rules.

In the same action, the EQC updated Chapter 28, which lists Maximum Achievable Control Technology (MACT) Standards, to reflect the federal standards, as they existed on July 1, 2005. It also incorporated a change in the federal Miscellaneous Organic Chemical Manufacturing MACT (Subpart FFFF), issued March 1, 2006, which extends the deadline for sources to comply with this standard from November 10, 2006 to May 10, 2008. Finally, it adopted by reference the MACT standard for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations (Subpart XX).

In addition to updating MACT standards, the EQC also updated two New Source Performance Standards in Chapter 18. The revision of the standards for steam generating units, cited as 40 CFR 60 Subparts Da and Dc was issued by the EPA on February 27, 2006. All of the changes adopted by the EQC in June currently await the Governor's signature.

In September 2006, the Air Quality Division plans to propose several changes to Title 129 for adoption by the EQC. Following up on major revisions to the Prevention of Significant Deterioration (PSD) program in September 2005, several modifications will be proposed which will correct or clarify PSD rule-related language in Chapters 1 (Definitions), 17 (Construction Permit Program), and 19 (PSD). While most changes will be editorial in nature, two substantive proposals for Chapter 19 would (1) remove the provision for early termination of a plant-wide applicability limitation (PAL) permit and (2) allow NDEQ discretion in requiring face-to-face meetings with sources undertaking projects that will increase emissions but that do not meet the definition of a major modification.

In addition to the PSD related changes, the Air Quality Division will propose, in September, the addition of a new Chapter 43. This chapter, titled "Visibility Protection" will give NDEQ the authority necessary to require sources to comply with provisions of the federal Regional Haze rule, including, where applicable, installation of Best Available Retrofit Technology (BART). The Regional Haze rule is intended to reduce emissions of air pollutants that impair visibility in "federal Class I areas", that is, national parks and national forests. Nebraska does not have any Class I areas, but must still ensure that Nebraska sources minimize visibility impacts outside the state.

In December 2006, the Air Quality Division plans to propose, for EQC adoption, rules to comply with the federal Clean Air Mercury Rule. A stakeholder process is currently underway to receive and consider input from Nebraska sources and the public on how Nebraska should comply with this rule.

Federal Air Quality Regulatory Actions March 2006 – July 2006

The following table lists the actions the U.S. Environmental Protection Agency (EPA) has taken on air quality regulations from March 2006 – August 2006. You can find more detailed information related to these actions on EPA's website at http://www.epa.gov/fedrgstr/EPA-AIR/.

Date	Rule	Action & Summary
3/1/06	**40 CFR Part 63 Subpart FFFF -** National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing.	Final rule amendment to extend the compliance date for existing sources by 18 months. With this final action, existing sources will be required to comply with the rule by May 10, 2008.
3/9/06	**40 CFR Parts 51, 52, 70, & 71** – Prevention of Significant Deterioration, Non-attainment New Source Review, & Title V	Proposed rule amendments regarding the treatment of Corn Milling Facilities Under the ``Major Emitting Facility'' Definition. EPA would treat wet and dry corn milling facilities in the same manner under the PSD, nonattainment NSR, and title V programs regardless of whether they produce ethanol fuel or ethanol fit for human consumption. If EPA adopts this option, EPA would redefine chemical process plants under the definition of ``major emitting facility'' to exclude wet and dry corn milling facilities which produce ethanol fuel.
3/10/06	**40 CFR Parts 50 and 51** – Ambient Air Quality Standards and State Implementation Plans	Proposed rule to govern the review & handling of air quality monitoring data influenced by exceptional events. Exceptional events are events for which the normal planning & regulatory process established by the Clean Air Act are not appropriate.
3/23/06	**40 CFR Part 63 Subpart EEE –** NESHAP for Hazardous Waste Combustors	EPA is staying the effective date of the standard for particulate matter for new cement kilns that burn hazardous waste while EPA reconsiders this provision. The length of the stay is three months, until June 23, 2006.
3/23/06	**40 CFR Part 63 Subpart EEE –** NESHAP for Hazardous Waste Combustors	Reconsideration of the new source standard for particulate matter for cement kilns that burn hazardous waste. Proposed revision to new source particulate matter standard for cement kilns & changes to the new source particulate matter standards for incinerators and liquid fuel boilers.
3/27/06	**40 CFR Part 51 –** National Ambient Air Quality Standards	Extension of comment period for proposed revisions to the 2/9/06 particulate matter ambient air quality standards.
3/29/06	**40 CFR Parts 59, 80, 85, & 86 –** Control of Hazardous Air Pollutants (HAPs) from Mobile Sources	Proposal to control benzene and other HAPs from gasoline, passenger vehicles, and portable gasoline containers.
4/5/06	**40 CFR Parts 51 & 93 -** PM2.5 De minimis Emission Levels for General Conformity Applicability	Direct final rule and proposal to add de minimis emissions levels for particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM2.5) National Ambient Air Quality Standards (NAAQS) and its precursors.
4/6/06	**40 CFR Part 63 Subpart R –** NESHAP for Gasoline Distribution Facilities	Final rule to satisfy residual risk review stating no further action to the emission standards is necessary.
4/7/06	**40 CFR Part 63 Subpart NNNNN–** NESHAP for Hydrochloric Acid Production	Final amendments to clarify applicability provisions, emission standards, and testing, maintenance, reporting requirements and to correct several typographical errors
4/7/06	**40 CFR Part 63 Subpart O –** NESHAP for Ethylene Oxide Sterilization Facilities	Final rule to satisfy residual risk review stating no further action to the emission standards is necessary.
4/7/06	**40 CFR Part 63 Subpart EE –** NESHAP for Magnetic Tape Manufacturing	Final rule to satisfy residual risk review stating no further action to the emission standards is necessary.
4/7/06	**40 CFR Part 63 Subpart Q –** NESHAP for Industrial Process Cooling Towers	Final rule to satisfy residual risk review stating no further action to the emission standards is necessary.
4/13/06	**40 CFR Part 63 Subpart EEE -** NESHAP for Hazardous Waste Combustors	Extension of the comment period from the 3/23/06 notice to 5/8/06.
4/14/06	**40 CFR Part 63 Subpart SSSSS –** NESHAP for Refractory Products Manufacturing	Withdrawal of direct final rule amendments published 2/13/06.

Date	Rule	Action & Summary
4/20/06	**40 CFR Parts 65 Subpart A & 63 Subparts A, F, G, L, N, U, W, Y, AA, BB, DD, GG, HH, LL, MM, SS, YY, CCC, EEE, GGG, HHH, JJJ, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, XXX, AAAA, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, UUUU, WWWW, XXXX, YYYY, ZZZZ, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, OOOOO, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT –** NESHAP General Provisions & Various Standards	Final rule amendments for the startup, shutdown and malfunction (SSM) provisions. Facility may deviate from SSM plan, but must still minimize emissions at all times. SSM plans must be maintained on site and the facility must report to the permitting authority whether plan was followed.
5/1/06	**40 CFR Part 63 Subpart GGGGG –** NESHAPs for Site Remediation	Proposed rule to amend specific provisions to resolve issues and questions subsequent to promulgation; correct technical omissions; and correct typographical, cross-reference, and grammatical errors.
5/10/06	**40 CFR Part 60 Subparts Cb and Eb –** NSPS and Emission Guidelines for Large Municipal Waste Combustors	Final amendments revising emission limits for existing sources subject to the Emission guidelines for dioxin, cadmium, lead, mercury, and particulate matter and the nitrogen oxides emission limit for mass burn rotary waterwall type units. Emission limits for new sources subject to the NSPS were revised for cadmium, lead, mercury, and particulate matter. Compliance testing procedures have also been revised for both regulations.
5/17/06	**40 CFR Part 63 Subpart HHHHH–** NESHAP for Miscellaneous Coating Manufacturing	Proposed amendments clarifying definitions and clarifying the compliance date for certain equipment.
5/19/06	**Draft Air Quality Criteria for Lead**	Public comment period on "Air Quality Criteria for Lead; Second External Review Draft."

Date	Rule	Action & Summary
5/24/06	**40 CFR Part 63 Subparts KK, JJJJ, & OOOO –** NESHAPs for Printing & Publishing, Paper & Other Web Coating, & Printing, Coating, and Dyeing of Fabric and Other Textiles	Direct final rule amendments to correct errors, resolve issues and questions, and clarify interaction between printing regulations.
6/1/06	**40 CFR Parts 51 & 93 -** PM2.5 De minimis Emission Levels for General Conformity Applicability	Withdrawal of direct final rule amendments published 4/5/06.
6/2/06	**40 CFR Parts 70 & 71 –** Operating Permit Program	Proposed rule interpretation that certain sections of the operating permits regulations do not require or authorize permitting authorities to assess or enhance existing monitoring requirements in implementing the operating permits independent of such monitoring required or authorized in other rules.
6/9/06	**40 CFR Part 60 – Subparts B, Da, & HHHH – NSPS General Provisions, Electrical Generating Units, & Clean Air Mercury Rule**	Final rule to address reconsideration petition. Revisions made to state mercury budgets, changes to NSPS emission limits, corrected SIP submittal dates, & clarification of applicability.
6/12/06	**40 CFR Parts 60 & 63 Subpart JJJJ & Subpart ZZZZ -** NSPS & NESHAPs for Reciprocating Internal Combustion Engines (RICE)	Proposed NSPS for new stationary spark ignition engines. Proposed NESHAP for RICE at area sources or those with rating less than 500 horsepower.
6/14/06	**40 CFR Part 63 Subparts F, G, H, & I –** NESHAPs for Synthetic Organic Chemical Manufacturing	Proposed rule to address residual risk. Two options proposed: no further controls or further control on process leaks, storage vessels, and vents and control units not currently controlled.
6/23/06	**40 CFR Part 63 –** NESHAP Source Categories	Correction to 40 CFR Part 63 on page 309, in Sec. 63.8395 paragraph (b), and on page 332, in Sec. 63.8545 paragraph (b), remove ``May 16, 2003'' and add in its place ``May 16, 2006''.
6/26/06	**40 CFR Parts 60 & 63 Subpart JJJJ & Subpart ZZZZ -** NSPS & NESHAPs for Reciprocating Internal Combustion Engines (RICE)	Corrections to 6/12/06 proposal.

Date	Rule	Action & Summary
6/28/06	**40 CFR Part 60 Subparts EEEE & FFFF -** NSPS & Emission Guidelines for Other Solid Waste Incineration Units	Reconsideration notice of and requesting comment on whether sewage and sludge incinerators should be excluded from the other solid waste incineration units (OSWI) rules.
7/6/06	**40 CFR Part 60 Subpart KKKK –** NSPS for Combustion Turbines	Final rule to reflect changes in nitrogen oxides (NOX) emission control technologies and turbine design since standards for these units were originally promulgated in 40 CFR part 60, subpart GG. The NOX and sulfur dioxide (SO2) standards have been established at a level, which brings the emissions limits up to date with the performance of current combustion turbines.
7/10/06	**40 CFR Parts 52 and 70 –** Approval & Promulgation of NE State Implementation Plan (SIP)	Direct final rule and proposed rule to approve NE SIP revising Title 129.
7/11/06	**40 CFR Part 60 Subpart IIII –** NSPS Stationary Compression Ignition Internal Combustion Engines (ICE)	Final rule establishing standards for new compression ignition ICE for particulate matter, nitrogen oxide, sulfur dioxide, non-methane hydrocarbons, and carbon monoxide.
7/13/06	**40 CFR Part 63 Subpart FFFFF –** NESHAP for Integrated Iron & Steel Manufacturing	The final amendments add a new compliance option, revise emission limitations, reduce the frequency of repeat performance tests for certain emission units, add corrective action requirements, and clarify monitoring, recordkeeping, and reporting requirements.

Date	Rule	Action & Summary
7/14/06	**40 CFR Part 63 Subpart FFFF –** NESHAP for Miscellaneous Organic Chemical Manufacturing	Final rule amendments to address petitioners concerns with various requirements, including applicability of specific operations and processes, the leak detection and repair requirements for connectors, criteria to define affected wastewater streams requiring control, control requirements for wastewater streams that contain only soluble hazardous air pollutants, the definition of ``process condensers,'' and recordkeeping requirements for Group 2 batch process vents.
7/18/06	**40 CFR Part 63 Subpart LLL –** NESHAP for Portland Cement Manufacturing	Reopening comment period on proposed emission standards for mercury, hydrogen chloride, and total hydrocarbons.
7/27/06	**40 CFR Parts 60 & 63 Subparts JJJJ & ZZZZ -** NSPS & NESHAPs for Reciprocating Internal Combustion Engines (RICE)	Extension of public comment. Comments due 10/11/06.
7/27/06	**40 CFR Part 63 Subpart M –** NESHAP for Perc Dry Cleaners	Final rule increasing the control requirements and addressing residual risk and technology review requirements. The rule requires enhanced leak detection program, prohibits the use of existing perc transfer machines, and requires additional control for new sources.
7/28/06	**40 CFR Part 63 Subpart EEEE –** NESHAP for Organic Liquid Distribution	Final rule amendments addressing reconsideration petitions and amending vapor balancing options and adding clarifications and technical corrections.